

## SYSTEM AND METHOD WITH IMPROVED AUTOMATIC TESTING **FUNCTIONS FOR DEFINING CAPTURE THRESHOLDS**

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## **Abstract of the Invention**

An implantable cardiac stimulation system capable of automatic capture verification is provided with an associated method for performing automatic testing functions using programmable, or automatically determined, AV delays. Automatic threshold testing and evoked response sensitivity testing performed at a user-specified AV delay setting, rather than a preset setting, allows assessment of automatic capture verification based on an AV delay relevant to daily system function. Further features of the present invention are an adjustable frequency with which automatic threshold tests are performed and an adjustable frequency with which threshold test results are stored in memory in a threshold record for better monitoring of lead stability or impending clinical problems. The frequency of performing threshold tests and the frequency of storing threshold test results may be varied according to the threshold stability. Stored threshold test results are advantageously displayed with respect to a fixed or variable time scale.